Exotic raw materials occasionally encountered on archaeological sites in the region include argillite and rhyolite, both with primary outcrops located to the north and west of the project area, respectively.

## 3.0 RECOMMENDATIONS

The nature of the School Bell Road Improvements project APE along an existing transportation and utilities corridor with modern disturbances to the stratigraphic profile, as well as the constricted areal size of the project APE, preclude the potential for pre-contact period archaeological resources in portions of it. However, based on the presence of numerous previously identified pre-contact period archaeological sites adjacent to or near the School Bell Road Improvements project APE, its upland topographic setting, and the presence of undisturbed or eroded well drained soils of appropriate age to contain archaeological resources in portions of the project APE, some Phase I archaeological survey investigations are recommended.

Based on the presence of several potentially significant historic structures adjacent to the project APE, the indications that this area has been inhabited by Euro-Americans since the seventeenth century, and the long association of the project APE as a transportation corridor, the School Bell Road Improvements project APE has a moderate probability to contain historic period archaeological resources. Due to the long-term rural nature of the project APE, and based on the numbers of different types of previously identified historic archaeological sites located near the project APE, if historic period archaeological sites are identified in the project APE, they will likely be related to Euro-American rural agricultural and/or domestic activities. However, given the constricted size and positioning of most of the project APE, it is unlikely that generalized historic artifact scatters or isolates will contribute significant information to the specific land-use history of the project APE.

## 4.0 PHASE I ARCHAEOLOGY SURVEY WORK PLAN

## 4.1 Introduction

The Phase I archaeology survey fieldwork is predicated on the combined results of the background research and the geomorphology reconnaissance discussed above, and includes testing for both pre-contact and historic period archaeological resources. Portions of the School Bell Road Improvements project APE were coded for testing with regard to numerous variables, such as the presence of *in situ* soils of appropriate age to contain precontact archaeological remains and perceived associations with historic events and/or persons important to local history. Other portions of the project APE were coded as not testable due to the presence of modern period disturbances that have extensively interrupted or obliterated the subsurface stratigraphic record, the presence of natural wetland soils that are typically not associated with pre-contact habitation, and the presence of paving or other conditions making the subsurface inaccessible.

When these factors are considered, approximately 2.35 ha (5.81 ac), or 40.21 percent of the School Bell Road Improvements project APE is categorized as testable at the Phase I survey level. A maximum of 100 shovel test pits (STPs) is anticipated as necessary to complete a Phase I survey of the testable portions of the School Bell Road Improvements project APE, as currently designed. The breakdowns for the testable versus not testable portions of the project APE are presented below in Table 4 and shown in Figure 2. The testable and not testable areas will be refined as the fieldwork for the project progresses, and in concert with information gathered from historic structures research and other local historic information supplied by landowners and the general public.

## 4.2 Work Plan

The archaeological fieldwork will utilize hand excavated STPs in all testable portions of the project APE that contain relatively undisturbed *in situ* developed soil/sediment profiles and sufficient potential for precontact and/or historic period archaeological resources to exist based on the previously completed background research, the geomorphological reconnaissance, and field inspections.

Table 4.

Proposed Phase I Archaeology Survey of the School Bell Road Improvements Project APE

Testing				
Project APE Segment	Methodology*	Expected Resources	Justification	
North Side of School Bell Road (west to east)				
A Stations 17+50 to 25+50	no testing	none	scalped and graded areas, paved driveways, previously excavated biofiltration swale, adjacent to existing roadway shoulder disturbance.	
Test Area 1 (Photograph 1) Stations 25+50 to 29+75	12 STPs at 15.0 m intervals	pre-contact - isolates; small artifact scatters; temporary, single to multiple use sites historic - rural domestic artifact scatters	<ul> <li>in situ soils of appropriate age; upland topographic setting; well drained soils (Matapeake silt loam); minor disturbance from existing roadway; minor erosion of Matapeake soils.</li> <li>no historic documentation of structures; rural land-use throughout historic period.</li> </ul>	
B Stations 29+75 to 51+75	no testing	none	paved driveways; extensive housing development with associated fencing, landscaping, and paving; excavated water retention area; ditches and subsurface road drainage structures; buried utilities; adjacent to existing roadway shoulder disturbance.	
C Stations 51+75 to 54+80	no testing	none	paved driveways; disturbances by landscaping; adjacent to existing roadway shoulder disturbance.	
Test Area 3 (Photograph 3) Stations 54+80 to 69+90	29 STPs at 15.0 m intervals	pre-contact - isolates; small artifact scatters; temporary, single to multiple use sites historic - rural domestic artifact scatters	in situ soils of appropriate age; old agricultural field with potential localized modern disturbances; moderately well-drained soils (Mattapex silt loam).  no historic documentation of structures; rural land-use throughout historic period.	
Test Area 4 Stormwater Management Area (Photograph 4) Stations 69+90 to 76+00	36 STPs at 15.0 m intervals	pre-contact - isolates; small artifact scatters; temporary, single to multiple use sites historic - rural domestic artifact scatters	in situ soils of appropriate age; agricultural field with potential localized modern disturbances; moderately well drained soils (Mattapex and Mattapeake silt loams).  no historic documentation of structures; rural land-use throughout historic period.	

Table 4.

Proposed Phase I Archaeology Survey of the School Bell Road Improvements Project APE (Continued)

Project APE Segment	Testing Methodology*	Expected Resources	Justification	
South Side of School Bell Road (west to east)				
D Stations 17+50 to 31+80	no testing	none	paved driveways and roadway; housing with associated fencing, landscaping, and paving; scalped and graded areas; excavated water retention ditches; adjacent to existing roadway shoulder disturbance.	
E Stations 31+80 to 48+00	no testing	none	paved roadway; extensive housing development with associated fencing, landscaping, and paving; excavated water retention ditches; adjacent to existing roadway shoulder disturbance.	
Test Area 2 (Photograph 2) Stations 48+00 to 52+80	10 STPs at 15.0 m intervals	pre-contact - isolates; small artifact scatters; temporary, single to multiple use sites  historic - rural domestic artifact scatters	in situ soils of appropriate age; agricultural fields with minor plow disturbance; moderately well drained soils (Matapeake silt loam); minor disturbance from existing roadway.  no historic documentation of structures; rural land-use throughout historic period.	
F Stations 52+80 to 76+00	no testing	none	paved driveways and roadways; commercial establishments and housing with associated fencing, landscaping, and paving; scalped and graded areas; excavated water retention ditches; utilities; adjacent to existing roadway shoulder disturbance.	



Photograph 1. View of Test Area 1, facing east-southeast.



Photograph 2. View of Test Area 2, facing east.



Photograph 3. View of Test Area 3, facing east.



Photograph 4. View of Test Area 4, facing north.

Due to the constricted width of the project APE, there do not appear to be areas within the project APE that would be amenable to plowing/discing strictly for the archaeological resources research; therefore, the survey will utilize STPs spaced at 15.0 m (49.2 ft) intervals along transects spaced at 15.0 m (49.2 ft) intervals. Should the ground surface visibility of any test area exceed 85 percent due to landowner plowing/discing, surface reconnaissance may be used in concert with the excavation of STPs. A minimal number of STPs will be excavated in order to adequately characterize the subsurface profile of the area being surface collected. Should artifacts be found during the STP excavations or surface collection, the boundaries of the artifact distribution will be delineated by lessening the STP interval. Judgmental STPs may also be used in areas where field observations warrant their emplacement. The STPs will measure 50.0 cm (19.7 in) in diameter and will be excavated to sterile subsoil. All sediments removed from the STPs will be screened through 0.64 cm (0.25 in) mesh hardware cloth. This proposal includes the excavation of a maximum of 100 STPs within the School Bell Road Improvements project APE.

Daily notes will be recorded and photographs will be taken of the archaeological resources research. The results of the geomorphology and Phase I survey fieldwork will be presented in a Phase I archaeology report. The report will include an overview of the background and field methods, plan view maps, representative profiles, drawings and photographs, and detailed archaeological results. Any recovered artifacts will be preliminarily analyzed in order to allow questions of site integrity and occupation span to be addressed. This proposal includes the preliminary analysis of a maximum of 75 artifacts. A NRHP eligibility discussion including any Phase II recommendations will be presented for each site identified. If Phase II studies are authorized, they will be completed under supplemental agreement.